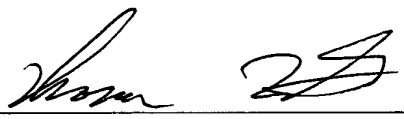
REMARKS

Subsequent to entry of the foregoing amendment, Claims 1 - 32 will be pending in this application. Submitted herewith is a Submission of Marked Up Claims.

Applicants request entry of the foregoing amendment prior to examination of this application. Favorable action is respectfully solicited.

Respectfully Submitted,



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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Jiang Hsieh, et al. :

: Art Unit:

U.S. Patent No.: 6,256,368 :

: Examiner:

Filing Date of Reissue: July 2, 2003 :

:

For: METHODS AND APPARATUS FOR SCOUT-BASED CARDIAC CALCIFICATION SCORING :

SUBMISSION OF MARKED UP CLAIMS

Mail Stop: Reissue
Hon. Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Submitted herewith are marked up claims in accordance with 37 C.F.R. Section 1.211(c)(1)(ii), wherein additions are underlined and deletions are [bracketed].

PLEASE ADD THE FOLLOWING NEW CLAIMS

22. (Newly added) A method for facilitating calcification scoring, said method comprising:

imaging a heart at a first phase of a cardiac cycle to obtain a first image;

imaging the heart at a second phase of the cardiac cycle different from the first phase to obtain a second image; and

determining a difference image using the first and second images.

23. (Newly added) A method in accordance with Claim 22 further comprising instructing the patient to hold his or her breath during imaging.

24. (Newly added) A method in accordance with Claim 22 further comprising identifying calcification deposits on portions of the difference image corresponding to moving body structures of the patient.

25. (Newly added) A method in accordance with Claim 24 wherein identifying calcification deposits is performed utilizing computer image processing.

26. (Newly added) A method in accordance with Claim 24 wherein identifying calcification deposits on portions of the difference image corresponding to moving body

structures of the patient comprises comparing intensities of neighboring pixel groups of the difference image to identify differences in intensity above a threshold indicative of calcification.

27. (Newly added) A method in accordance with Claim 26 wherein identifying calcification deposits further comprises scoring an amount of calcification in accordance with differences in image intensities.

28. (Newly added) A method in accordance with Claim 22 further comprising processing the difference image to enhance appearance of calcification deposits.

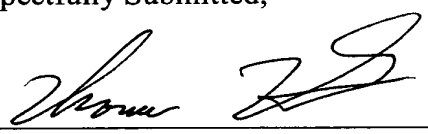
29. (Newly added) A method in accordance with Claim 22 further comprising monitoring an EKG signal of the patient's heart to determine trigger times for imaging a heart to obtain a first image and imaging a heart to obtain a second image at different phases of the cardiac cycle.

30. (Newly added) A method in accordance with Claim 22 wherein imaging a heart to obtain a first image and imaging a heart to obtain a second image are performed at the same time utilizing different detector rows of a imaging system.

31. (Newly added) A method in accordance with Claim 30 wherein the imaging system comprises a table configured to move the patient during imaging, and further comprising adjusting a rate at which the table moves during imaging in accordance with the cardiac cycle of the patient.

32. (Newly added) A method in accordance with Claim 31 wherein the imaging system comprises at least three detector rows, and further comprises acquiring noise estimation information including data representative of a third image, and estimating background noise in the difference image utilizing the noise estimation information.

Respectfully Submitted,



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